

Claims

We claim:

1 1. A method of managing the state of networked computers, comprising:
2 specifying a preferred state;
3 defining selected networked computers to be maintained in the preferred state;
4 monitoring the selected networked computers for deviation from the preferred
5 state; and
6 bringing the selected networked computers that deviate from the preferred state
7 to the preferred state via a mobile software agent that travels autonomously between
8 the selected networked computers.

1 2. The method of claim 1, wherein specifying a preferred state comprises:
2 defining a preferred software configuration of a computer; and
3 defining actions needed to bring the computer to the desired software
4 configuration if the computer is not in the preferred software configuration.

1 3. The method of claim 1, wherein defining selected computers to be maintained in
2 the preferred state comprises generating a list of networked computers to be
3 maintained in the preferred state.

1 4. The method of claim 3, wherein the mobile software agent autonomously travels
2 between the selected networked computers by traveling to the computers on the list of
3 networked computers to be maintained in the preferred state.

1 5. The method of claim 1, wherein defining selected computers to be maintained in
2 the preferred state comprises defining a network space of computers to be maintained
3 in the preferred state.

1 6. The method of claim 5, wherein the mobile software agent autonomously travels
2 between the selected networked computers by traveling to the computers in the

3 networked space of computers to be maintained in the preferred state.

1 7. The method of claim 1, wherein monitoring the selected networked computers for
2 deviation from a preferred state is performed via a mobile monitoring agent.

Sub
A1/ 1 8. The method of claim 7, wherein the mobile agent travels autonomously between
2 the selected networked computers.

9. The method of claim 1, wherein the mobile software agent that brings the selected
2 networked computers that deviate from the preferred state to the preferred state also
3 performs the monitoring the selected networked computers for deviation from the
4 preferred state by first monitoring each selected networked computer it travels to for
5 deviation from the preferred state and subsequently bringing the computer to the
6 preferred state if it deviates from the preferred state.

1 10. The method of claim 1, wherein the mobile software agent travels autonomously
2 between the selected networked computers by transferring itself from a present
3 computer to a next computer, and erasing itself from the present computer after it has
4 successfully transferred itself to the next computer.

1 11. The method of claim 1, further comprising providing a trip report from the mobile
2 software agent to a host system.

1 12. The method of claim 1, wherein the mobile software agent is further operable to
2 travel to computers not among the selected networked computers to transfer data.

1 13. The method of claim 12, wherein the mobile software agent maintains the trip
2 report that is reported to a host computer upon return of the mobile software agent to
3 the host computer.

1 14. The method of claim 12, wherein the mobile software agent sends a trip report to
2 the host computer periodically as it travels between the selected networked computers.

1 15. The method of claim 1, wherein the selected networked computers have a mobile
2 software agent host program thereon to facilitate mobile software agent travel and
3 execution.

1 16. A machine-readable medium with instructions stored thereon, the instructions
2 operable when executed to cause a computer to:
3 receive and store data defining a preferred state of computers;
4 receive and store data defining selected networked computers to be maintained
5 in the preferred state;
6 generate a mobile software agent that travels autonomously between the
7 selected networked computers and brings the selected networked computers that
8 deviate from the preferred state to the preferred state.

1 17. A machine-readable medium with instructions stored thereon, the instructions
2 operable when executed to cause a computer to:
3 generate a mobile software agent that travels autonomously between selected
4 networked computers that deviate from a preferred state to the preferred state.

1 18. A machine-readable medium with instructions stored thereon, the instructions
2 operable when executed to cause a computer to:
3 monitor a first networked computer for deviation from a preferred state;
4 bring the first networked computer to the preferred state if it deviates from the
5 preferred state; and
6 copy the executable instructions operable to perform the monitoring, bringing
7 to a preferred state, and copying functions to a second networked computer.

1 19. The machine-readable medium of claim 18, with further instructions operable
2 when executed to cause a computer to remove the executable instructions operable to
3 perform the monitoring, bringing to a preferred state and copying functions from the
4 first networked computer after the instructions are successfully copied to the second
5 networked computer.

1 20. A computerized networked computer management system, comprising:
2 a networked computer server, operable to generate a mobile software agent that
3 travels autonomously between networked computers, monitors the networked
4 computers for deviation from a preferred state, and brings the selected computers that
5 deviate from the preferred state to the preferred state.

1 21. A method of managing the state of networked computers, comprising:
2 specifying a preferred state;
3 defining selected networked computers to be maintained in the preferred state;
4 monitoring the selected networked computers for deviation from the preferred
5 state; and
6 bringing the selected networked computers that deviate from the preferred state
7 to the preferred state via a mobile software agent that is sent to the selected networked
8 computers.